



Army Aircrew Coordination Training Enhancement Program (ACTE)

Summary

Military rotary-wing aircraft have become increasingly complex in recent years, necessitating a high level of coordination amongst all rated and non-rated members of the aircrew. In response to these changes and the consistent citing of crew coordination failures in Army aviation accidents, the U.S. Congress identified the need to revitalize crew coordination training in Army aviation. ARI's Rotary-Wing Aviation Research Unit convened a working group at Fort Rucker to provide guidance and oversight for Army Aircrew Coordination Training Enhancement (ACTE). The group is made up of key personnel from the U.S. Army Aviation Center (USAAVNC) and other subject matter experts interested in contributing to planning, developing, implementing or evaluating the program.

The Plan: Phase I

In FY 99, Dynamics Research Corporation (DRC) was awarded a contract for this effort under a Broad Agency Announcement. DRC developed the initial Army ACT



program late in 1992, but that training package did not provide a mechanism to effectively sustain high levels of aircrew coordination training.

The purpose of the current effort, then, is to enhance, integrate, sustain, and maintain aircrew coordination training in the operations of aviation units today and in the future.

Toward this end, DRC and ARI, with input from the working group, proposed the following general approaches:

- ◆ Analysis of the current aircrew coordination training program from a total systems perspective to identify conflicts, bottlenecks, and deficiencies in implementing team coordination in daily flying operations;

- ◆ Refinement of team evaluation techniques and tools for assessing overall performance along specific behavioral proficiency dimensions;
- ◆ Development of prototype focused interventions for training and evaluating team coordination behaviors and for reducing specific patterns of error;
- ◆ Validation of prototype team training and evaluation techniques in selected aviation units, and;
- ◆ Fielding of prototype training, evaluation, and technology products.

Follow-On Efforts

The current ACT Enhancement program, with its focus on upgrading and sustaining ACT, constitutes Phase I in a three-part plan to bring crew coordination training into the 21st Century. Congressional funding has already been earmarked for follow-on research and development efforts. Phase II will further advance the upgraded program by: tailoring training

scenarios for specific aircraft and missions; integrating ACT into Readiness Level training, APART evaluations, and Flight School XXI; including ACT in distance learning developments, and; providing a web site for ACT related data and anonymous reporting.

Phase III will focus on incorporating the products of Phase I and II as part of normal operations and deploying advanced ACT applications. It will include the development of training packages for non-rated crew members and implementation of the Accident Identification Tool in accident investigations.

Improved crew coordination training has been identified as one of the most urgent needs of Army aviation.

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